

***Exhibit 1***

*The Claims as of September 11, 2009*

Claim 1 (Withdrawn): A pharmaceutical composition comprising a pharmaceutical carrier and at least one compound in isolated or purified form selected from the group consisting of cobaltocene-octamethyl and stigmastan-3,5,-diene.

Claim 2 (Withdrawn): The pharmaceutical composition of claim 1, wherein the compound is cobaltocene-octamethyl.

Claim 3 (Withdrawn): The pharmaceutical composition of claim 1, wherein the compound is stigmastan-3,5,-diene.

Claim 4 (Withdrawn): The pharmaceutical composition of claim 1, comprising cobaltocene-octamethyl, stigmastan-3,5,-diene, and friedelin.

Claim 5 (Withdrawn): The pharmaceutical composition of claim 1, further comprising at least one compound selected from the group consisting of  $\alpha$ -caryophyllene,  $\beta$ -caryophyllene, caryophyllene oxide, friedelin, cyclododecane, acetic acid, and a terpene.

Claim 6 (Withdrawn): The pharmaceutical composition of claim 2, further comprising a terpene or acetic acid.

Claim 7 (Withdrawn): The pharmaceutical composition of claim 6, wherein said terpene is  $\beta$ -myrceane.

Claim 8 (Withdrawn): The pharmaceutical composition of claim 6, further comprising hexadecanoic acid.

Claim 9 (Withdrawn): A pharmaceutical composition comprising a pharmaceutical carrier and at least one compound selected from the group consisting of galoxolide and benzyl salicylate.

Claim 10 (Withdrawn): The pharmaceutical composition of claim 9, comprising galoxolide and benzyl salicylate.

Claim 11 (Withdrawn): The pharmaceutical composition of claim 9, further comprising at least one compound selected from the group consisting of 3-cyclohexane-1-methanol, camphene, 1,4-cycloprop-azulene, and phytol.

Claim 12 (Withdrawn): The pharmaceutical composition of claim 9, wherein the compound is galoxolide.

Claim 13 (Withdrawn): The pharmaceutical composition of claim 9, wherein the compound is benzyl salicylate.

Claim 14 (Withdrawn): The pharmaceutical composition of claim 9, wherein the compound is  $\alpha$ -pinene.

Claim 15 (Withdrawn): A pharmaceutical composition comprising a pharmaceutical carrier and at least one compound selected from the group consisting of galoxolide, benzyl salicylate, eucalyptol and  $\alpha$ -pinene, wherein the composition has antimycobacterial activity.

Claims 16-25 (Canceled).

Claim 26 (Withdrawn): A method of inhibiting the growth of a mycobacterium, comprising administering a composition comprising a carrier and at least one compound selected from among cobaltocene-octamethyl, stigmastan, 3,5-diene, galoxolide, benzyl salicylate, eucalyptol, and  $\alpha$ -pinene.

Claim 27 (Withdrawn): The method of claim 26, wherein said *M. avium*, *M. bovis*, *M. intracellulare*, *M. kansaii*, *M. leprae*, *M. marinum*, *M. phlie*, *M. scrofulaceum*, *M. smegmatis*, *M. fortuitum*, *M. tuberculosis*, or *M. ulcerans*.

Claim 28 (Withdrawn): The method of claim 26, wherein said mycobacterium is in a mammal and said mammal is a human or a bovine.

Claim 29 (Withdrawn): The method of claim 28, wherein said composition is administered orally.

Claim 30 (Withdrawn): The pharmaceutical composition of claim 15, wherein the compound is eucalyptol.

Claim 31 (Withdrawn): The pharmaceutical composition of claim 15, wherein the compound is  $\alpha$ -pinene.

Claim 32 (Previously presented): A method of preparing a composition having antibacterial activity comprising extracting a material from a *Mammea Americana* plant in an organic solvent, contacting the extracted material with a chromatographic separation system, eluting a fraction comprising stigmastan-3,5,-diene from the chromatographic separation system with a mobile polar phase, and assaying the fraction to ascertain the fraction has antibacterial activity.

Claim 33 (Canceled)

Claim 34 (Withdrawn): The method of claim 32, wherein said plant is *Marchantaceae polymorpha hepatica*.

Claim 35 (Withdrawn): The method of claim 32, wherein said plant is *Callistemon citrinus* skeels.

Claim 36 (Canceled).

Claim 37 (Canceled).

Claim 38 (Canceled).

Claim 39 (Canceled).

Claim 40 (Previously presented): The method of claim 32, wherein said fraction comprising stigmastan-3,5,-diene further comprises at least one compound selected from the group consisting of friedelin, cyclododecane, and acetic acid.

Claim 41 (Previously presented): The method of claim 32, wherein said fraction comprising stigmastan-3,5,-diene further comprises friedelin.

Claim 42 (Withdrawn): The method of claim 32, wherein said plant material is from leaves of *Marchantaceae polymorpha* and said composition comprises cobaltocene-octamethyl.

Claim 43 (Withdrawn): The method of claim 42, wherein said composition further comprises at least one compound selected from the group consisting of  $\beta$ -myrceane, acetic acid, and hexadecanoic acid.

Claim 44 (Withdrawn): The method of claim 42, wherein said composition further comprises  $\beta$ -myrceane.

Claim 45 (Withdrawn): The method of claim 32, wherein said plant material is from leaves of *Callistemon citrinus* and said composition comprises at least one compound selected from the group consisting of galoxolide, benzyl salicylate, and  $\alpha$ -pinene.

Claim 46 (Withdrawn): The method of claim 45, wherein said composition further comprises at least one compound selected from the group consisting of eucalyptol, a terpene, 3-cyclohexane-1-methanol, camphene, 1,4-cycloprop-azulene, and phytol.

Claim 47 (Previously presented): The method of claim 32, wherein the organic solvent is methylene chloride.

Claim 48 (Currently amended): The method of claim 32, wherein the ~~bacteria is an~~antibacterial action is against a mycobacterium.

Claim 49 (Previously presented): The method of claim 48, wherein the mycobacterium is *M. avium*, *M. bovis*, *M. intracellulare*, *M. kansaii*, *M. leprae*, *M. marinum*, *M. phlei*, *M. scrofulaceum*, *M. smegmatis*, *M. fortuitum*, *M. tuberculosis*, or *M. ulcerans*.

Claim 50 (Canceled).

Claim 51 (Canceled).

Claim 52 (Canceled).

Claim 53 (Canceled).

Claim 54 (Canceled).

Claim 55 (Canceled).

Claim 56 (Previously presented): The method of Claim 32, wherein the material is extracted from plant leaves.

Claim 57 (Previously presented): The method of claim 40, wherein said fraction comprising stigmastan-3,5,-diene further comprises at least one compound selected from the group consisting of a terpene, a caryophyllene, and cyclododecane.

Claim 58 (Presently amended): The method of Claim 32, wherein the administering of the fraction having ~~antimicrobial-antibacterial~~ activity ~~against microbes~~, comprises assaying the fraction for activity against *E. coli* or mycobacterium.

Claim 59 (Previously presented): A method of preparing a composition having antimicrobial activity, comprising extracting a material from a *Mammea Americana* plant in an organic solvent, contacting the extracted material with a chromatographic separation system, eluting a fraction comprising stigmastan-3,5,-diene or cobaltocene octamethyl with a mobile polar phase, and assaying the fraction to ascertain the fraction has antibacterial activity.

Claim 60 (Canceled)

Claim 61 (Canceled)

Claim 62 (Currently amended): The method of Claim 59, wherein said antibacterial assay is a mycobacterium based assay.

Claim 63 (New presented) A method of preparing a composition having antibacterial activity, comprising extracting material from a *Mammea Americana* plant in an organic solvent,

contacting the extracted material with a chromatographic separation system, eluting at least two fractions from the chromatographic separation systems with a mobile polar phase, and selecting a fraction showing antibacterial activity and comprising stigmastan-3,5,-diene or cobaltocene octamethyl.

Claim 64 (New presented) The method of claim 63 wherein the selected fraction having antibacterial activity comprises stigmastan-3,5,-diene and cobaltocene octamethyl.

Claim 65 (New presented) The method of claim 63, wherein the selected fraction further comprises at least one compound from among friedelin and terpene.

Claim 66 (New presented) The method of claim 64, wherein the selected fraction further comprises at least one compound from among friedelin and terpene.

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